

Malaysia EE&C Policy and Support Measures Towards Carbon Neutrality	
1. Climate Change Initiatives	
1-1. Name of the initiatives, competent ministries/agencies, and the outline of the initiatives	1. National Energy Policy, 2022-2040 (NEP) - Launched on 19 September 2022 under purview Ministry of Economy. - Vision: Energy sustainability towards achieving shared prosperity - Objectives: 1. enhancing macroeconomic resilience and energy security 2. achieving social equitability and affordability 3. ensuring environmental sustainability - The NEP laid out the roadmap for Malaysia to achieve the Aspiration targets by the year 2040, improve its socioeconomic position and is in line with its other policies to achieve net-zero greenhouse gas emissions by 2050. - Low Carbon Nation Aspiration 2040 which is part of the NEP is developed based on the existing plans in the energy sector. - The Aspiration aims to achieve various targets in the energy-related sectors covering both electrical and non-electrical components in transport, industrial, residential and commercial. It targets a higher level of urban public transport modal share, electric vehicle (EV) penetration, share of alternative lower carbon fuels in heavy vehicles and marine transport and enhanced energy efficiency in industrial and commercial as well as residential sectors. In addition, the Aspiration entails a higher level of RE penetration in the installed capacity and total primary energy supply (TPES), with no new coal power plant. - The NEP aims to achieve nine selected targets as follows: 1. increasing percentage of urban public transport modal share from 20% to 50% 2. increasing the percentage share of electric vehicles from less than 1% to 38% 3. Alternative fuel standard for heavy transport from B5 to B30 4. Increasing the percentage of liquefied natural gas (LNG) as alternative fuel for marine transport from 0% to 25% 5. increasing the percentage of residential energy efficiency savings from less than 1% to 10% 6. increasing the percentage of industrial and commercial energy efficiency savings from less than 1% to 11% 7. increasing the total installed capacity of renewable energy from 7.6GW (gigawatts) in 2018 to 18.4GW in 2040 8. reducing the percentage of coal in installed capacity from 31.4% to 18.6% 9. increasing overall percentage of renewable energy in the total primary energy supply from 7.2% to 17% - To reach these targets by 2040, the NEP sets four strategic goals: optimising energy resources to help with sustainable economic growth; stimulating growth, market opportunities and cost advantages for the economy and people; increasing energy sector's input to environmental sustainability; and making sure energy security and delivering financial sustainability. 2. National Energy Transition Roadmap (NETR) - NETR Phase 1 launched on 27 July 2023 and NETR Phase 2 launched on 29 August 2023, under purview Ministry of Economy. - Part 1 outlines the 10 flagship catalyst projects and impact initiatives based on six energy transition levers, namely EE; RE; hydrogen; bioenergy; green mobility; and carbon capture, utilisation and storage (CCUS). The six levers are further supported by five enablers: financing and investment; policy and regulation; human capital and just transition; technology and infrastructure; and governance and implementation. - Part 2 focuses on establishing the energy mix, GHG emissions reduction pathway, selected targets and initiatives. - NETR emphasises on six energy transition levers that will unlock economic opportunities and reduce impact to the environment. Of the six, EE stands out as the most important lever as it is cost effective and promotes resource optimisation. RE offers diversification from traditional fossil fuels through adoption of sustainable energy sources. The focus on hydrogen recognises its potential as a clean and emerging energy carrier that can be utilised, particularly by the transportation sector. Given that energy transition pathway is country specific, bioenergy lever leverages Malaysia’s abundant biomass resources, particularly from agriculture, offering both economic value and a cleaner energy source. Meanwhile, from demand perspective, green mobility lever addresses the significant emissions from the transportation sector and aligns with urbanisation trends, advocating for cleaner urban transportation. Lastly, CCUS offers a solution for hard-to-abate industrial emissions, with potential repurposing of Malaysia’s existing petroleum facilities. - 10 flagship catalyst projects and initiatives were identified. These flagship projects are expected to generate an estimated total investment of more than RM25 billion, create 23,000 job opportunities and reduce GHG emissions of more than 10,000 Gg CO2 equivalent per year. - Five key cross-cutting enablers and twelve initiatives that seamlessly align with enablers highlighted in NEP
1-2. Specific contents of the climate change initiatives	- In NETR Lever #2 Renewable Energy offers diversification from traditional fossil fuels through adoption of sustainable energy sources. - Over the last decade, the Government of Malaysia has established long-standing programmes and supporting policies to catalyse rollout of RE technologies. These programmes have helped stimulate significant RE growth over the past decade. Since 2011, solar PV remains the most encouraging segment of the national RE landscape with an installed capacity compound annual growth rate (CAGR) of 48%, expanding from 0.1 GW to 2.6 GW. - In May 2023, the Government reaffirmed its commitment to unlock economic opportunities through a low-carbon transition, setting out the ambitious target to achieve 70% RE installed capacity in the power mix by 2050. NETR aims to reinforce this ambition and inform an accelerated RE rollout by affirming two essential targets: • Target 1: 70% RE installed capacity share by 2050 • Target 2: No new coal power plant - Key initiatives under RE Energy Transition Lever in NETR: 1. Establish solar parks for accelerated deployment of utility-scale solar 2. Promote floating solar and agrivoltaic technology 3. Expand virtual aggregation model for rooftop solar 4. Develop plan for accelerated investments of transmission and distribution 5. Develop TPA framework for sourcing of RE 6. Set up RE exchange hub to enable cross-border RE trading ♦ At the heart of Malaysia's new energy policy is the potentially abundant biomass and solar power. Solar power is being introduced mainly in Sabah, which has many non-electrified areas. ♦ Increase renewable energy capacity in power generation by 31% in 2025 and 40% in 2035 through large scale solar, Feed-in-tariffs, Net Metering , RE Certificate. ♦ Enhancing Grid Flexibility by 500MW in 2035
1-3. Laws/regulations related to climate change measures, by name and year of introduction/revision	
1-4. Climate change action targets (NDC)	♦ Committed to be a carbon neutral country at the earliest in 2050 ♦ Renewable energy installed capacity is 23% ♦Interconnection of Power Transmission and Smart Grid Power Development Interconnection of power transmission in Sumatra, Java, Kalimantan, and Sulawesi in 2024, and promotion of smart grid development. [Goals toward carbon neutral]. Reduce GHG emissions intensity relative to GDP by 45% (unconditional) by 2030 (compared to 2005 levels). [New Energy Policy (NEP) 2022-2040 announced on September 19, 2022 ♦ Aim to increase residential energy efficiency savings to 10% and industrial/commercial energy efficiency savings to 11%. ♦Reduce greenhouse gas (GHG) emission intensity by 45% (GDPbase) by 2030, based on 2005 emission intensity, in accordance with the 2015 Paris Agreement. ♦Increase the domestic share of electric vehicles from less than 1% to 38% ♦Renewable energy generation from solar, biomass, and biogas to reach 31% of total installed capacity by 2025. ♦Green City Action Plan Initiatives

	1-5. Budgetary measures for climate change initiatives
2. Measures toward Carbon-Neutral	
	2-1. Carbon tax initiatives
	In progress investigating the potential for a carbon tax and developing a policy and design framework for a domestic ETS.
	2-2. Carbon credit and carbon trading initiatives
	N/A
	2-3. Trend of new technologies for climate change measures
	2-3-1. Hydrogen
	- In NETR Lever #3 Hydrogen, the focus on hydrogen recognises its potential as a clean and emerging energy carrier that can be utilised. - Malaysia has embarked on this journey to tap into the potential of hydrogen. This is particularly evident in Sarawak, where projects such as H2ornbill and H2biscus, in collaboration with Japanese and South Korean partners respectively, have made significant strides - These initiatives are congruent with Sarawak’s Hydrogen Economy Roadmap, focusing on utilising hydrogen to transform Sarawak into a developed state by 2030. - NETR proposes the following targets: • Blue Hydrogen: To completely phase out the use of grey hydrogen as a feedstock by 2050. • Green Hydrogen: To produce up to 2.5 Mtpa of green hydrogen by 2050 from RE such as hydroelectric power and solar. • Low-carbon Hydrogen Hubs: To establish one low-carbon hydrogen hub by 2030, and an additional two hubs by 2050, bringing the total to three hubs. - Key initiatives under Hydrogen Energy Transition Lever in NETR: 1. Establish low-carbon hydrogen standards and regulations 2. Develop domestic green electrolyser manufacturing capabilities 3. Reduce Levelized Cost of Hydrogen (LCOH) for low-carbon hydrogen 4. Stimulate demand for low-carbon hydrogen
	2-3-2. Fuel ammonia
	2-3-3. CCUS
	- In NETR Lever #6 CCUS, CCUS offers a solution for hard-to-abate industrial emissions, with potential repurposing of Malaysia’s existing petroleum facilities - While Malaysia has yet to develop policy and regulatory framework on CCUS, Budget 2023 the government intends to introduce a carbon tax, and will be examining the feasibility of setting up a carbon pricing mechanism. - NETR proposes the following targets: • By 2030: - è Develop 3 CCUS hubs (2 in Peninsular Malaysia, 1 in Sarawak) - èTotal storage capacity up to 15 Mtpa • By 2050: - èDevelop 3 carbon capture hubs - èTotal storage capacity between 40 to 80 Mtpa - Key initiatives under CCUS Energy Transition Lever in NETR: 1. Develop CCUS-specific policies and regulations 2. Strengthen CCUS adoption through provision of incentives across all relevant sectors and facilitate hub development 3. CC3 - Facilitate CCUS Hub infrastructure development 4. Establish transboundary CO2 agreement 5. Promote local utilisation of CO2 in industry
	2-3-4. Biofuel
	- In NETR Lever #4 Bioenergy, bioenergy lever leverages Malaysia’s abundant biomass resources, particularly from agriculture, offering both economic value and a cleaner energy source. - Malaysia generates 13.9 million tonnes of municipal solid waste (MSW) annually, with this number expected to rise in coming years. Therefore, MSW represents a significant, and expanding, source of bioenergy. It has the potential to serve as feedstock for power generation (waste-to-energy) and for biofuel in transportation. Additionally, Malaysia also has a large bioenergy potential from used cooking oil (UCO) with an estimated potential of approximately 240 kilotonnes per year. NETR outlines two key targets to support and enable other energy transition levers: • Increase biorefinery capacity to 3.5 billion litres by 2050 • Increase biomass and biogas power generation capacity to 1.4 GW by 2050 - Key initiatives under Bioenergy Energy Transition Lever in NETR: 1. Explore alternative bioenergy feedstock 2. Enhance attractiveness of palm oil biomass 3. Address challenge of supply security 4. Catalyse local demand for bioenergy 5. Improve solid waste management policies Mandate policies for the transportation sector: B30 Biodiesel by 2030
	2-3-5. Renewable Energy
	National Energy Transition Roadmap (2023): Steering Malaysia’s shift from traditional fossil fuels-based economy to a high-value green economy
	Under NETR lever 2: target No.1 : to achieve 70% RE installed capacity in the power mix by 2050 and target No. 1: No new coal power plant.
	2-3-6. Nuclear power
	2-3-7. Storage battery
	2-3-8. Initiatives for Smart City
	The ASEAN Smart Cities Network (ASCN) was established at the 32nd ASEAN Summit in 2018. ASCN is a collaborative platform working toward the common goal of smart and sustainable urban development, with 26 cities from 10 ASEAN member countries participating as pilot cities. In Malaysia, Kuala Lumpur, Kuching, Kota Kinabalu, and Johor Bahru are participating. The following is an overview of the action plans for Kuala Lumpur and Kuching. Kuala Lumpur Vision: To become a world-class sustainable city. Focus: Providing world-class infrastructure, modernizing the industrial sector, and environmental sustainability are top priorities. Strategic goals: increase share of green jobs to 4%, increase public transportation (60:40 modal share of private transportation), increase share of renewable energy sources to 27%, target 100 schools to participate in green school program, 30% increase in recycling rate as a solid waste management goal, increase the share of green buildings to 60% by 2030, increase the green floor area ratio to 20 m2 per capita, increase the gray water recycling rate to 20% by 2030, and achieve energy efficient spatial structures. City Project 1: Build a data center to collate, update, and distribute social, economic, and physical data. ▪ City Project 2: Development of dedicated bicycle lanes in accordance with the Pedestrian and Bicycle Master Plan 2019-2028. 2.Kuching. Vision: Achieve smart city status by improving quality of life through digital transformation. Focus areas: Improve the public transportation system to ensure efficient movement of people, and implement flood mitigation projects. Strategic goals: reduce commute times by 15% to 30%, increase the number of digital traffic signals from 32 to 140, integrate smart technology into flood management systems, and improve Kuching's international standing. City Project 1: Digitize traffic signals on all major urban roads in Kuching to provide "real time" traffic information. City Project 2: Establish an integrated flood management and response system to reduce flash flooding and inundation in flood prone areas.
	2-3-9. Initiatives for Smart Grid

	1. electrification rate: 98% 2. Smart grid plan: TNB's 25-year electricity technology roadmap (TRM) 3. smart meter deployment target: pilot project of 1,000 smart meters in two regions of Malaysia to be completed by 2023 4. current smart grid activities: Kemah Microgrid
	2-3-10. Initiatives for demand responcse
	2-3-11. Others
	2-4. Key Points to Promote and Support Climate Change Measures
	1.Low Carbon Development Strategy: Malaysia has outlined a low-carbon development strategy for the Iskandar region, as published by the Universiti Teknologi Malaysia (UTM) Low Carbon Asia Research Center . 2.National Determined Contribution (NDC): Malaysia has submitted its revised NDC with increased mitigation ambition, including an unconditional target to cut carbon intensity against GDP by 45% by 2030 compared to 2005 levels . 3.Carbon-Neutral Goal: Malaysia's Prime Minister has announced a goal for the country to become carbon neutral "as early as 2050" . 4.Renewable Energy Promotion: Malaysia has been focusing on increasing renewable energy generation, including solar power, through expanded quotas for Feed-in Tariff (FiT), Net Energy Metering (NEM), and Large Scale Solar (LSS) schemes . 5.Carbon Pricing and Market Development: Malaysia is looking to accelerate carbon projects and develop a carbon market ecosystem to address gaps in nature-based projects and carbon project developers . 6.Coal-Fired Power Plant Commitment: Malaysia has committed to stop building new coal-fired power plants as part of its carbon-neutral goal . 7.International Commitments: Malaysia has made commitments to the international community, including a pledge to be net-zero emission by 2050 and reduce CO2 intensity against GDP by 45% by 2030
	3. Energy Conservation initiatives
	3-1. Name and outline of energy policies, and ministries/agencies in charge of the policies.
	The National Energy Policy 2022-2040 (NEP) was formulated to achieve the following objectives: ◆ Enhancing macroeconomic resilience and energy security, ◆Achieving social equitability and affordability, and ◆ Ensuring environmental sustainability. The National Energy Policy 2022-2040 laid out the roadmap for Malaysia to achieve the aspiration targets by the year 2040, improve its socioeconomic position and is in line with its other policies to achieve net-zero greenhouse gas emissions by 2050.To reach these targets by 2040, the NEP sets four strategic goals: optimising energy resources to help with sustainable economic growth; stimulating growth, market opportunities and cost advantages for the economy and people; increasing energy sector's input to environmental sustainability; and making sure energy security and delivering financial sustainability.
	3-2. Name and outline of energy efficiency and conservation(EC) policies, and ministries/agencies in charge of the policies.
	1. National Energy Efficiency Action Plan (NEEAP), (2016-2025) Five Major Initiatives of the NEEAP Program (1) Promotion of 5-star appliances (2) Minimum Energy Performance Standards (MEPS) (3) Energy efficiency and conservation audits and energy management in buildings and industries (4) Promotion of cogeneration (5) Designing energy-efficient buildings Energy Efficiency and Conservation Act(EECA) will consists of requirements for: (1) Energy Management (2) Building Energy (3) Energy using product (4) Registration 2. The 12th Malaysia Plan (2021-2025): ENERGY AUDIT CONDITIONAL GRANT (EACG) ◆ Open to any industrial and commercial installations subjected to EMEE Regulations 2008 (electrical energy consumption equal or more than 6 million kWh for period of 1 year. ◆ Applicant shall appoint Energy Service Company (ESCO) registered with Energy Commission (EC) to implement the energy audit. ◆ Successful applicant of Energy Audit Conditional Grant (EACG) must implement the measure recommended in the energy audit report where the cost of implementation equal or more than the amount of grant given within 3 years. Upcoming Policy and Legal System: The Energy Efficiency and Conservation Act (EECA) is expected to be tabled in the Parliament of Malaysia in October 2023. Also, the National Energy Efficiency Action Plan (NEEAP) 2.0 is under study to ensure the continuity of the energy efficiency implementation plan and quantify the impact of the enforcement of EECA in Malaysia.
	3-3. Specific contents of EC policies
	Energy Efficiency Initiatives 2018: Building Energy Intensity (BEI) Labeling for Government Buildings 2019: Energy Performance Certification (EPC) in Government Buildings - Pilot Project 2021: Sustainability Achievement through Energy Efficiency (SAVE) 2.0 Program Energy Audit Conditional Grants (EACG) 2.0 Program 2022: MTR NEEAP Sustainability Achieved by Energy Efficiency (SAVE) 3.0 Program 1. Industrial Sector: ◆ Enforcement of EMEER 2008 to the affected installations ◆ Energy Audit Conditional Grant Project ◆ Malaysian Energy Efficiency Improvement Program (MEEIP) ◆ Industrial Energy Efficiency for Malaysian Manufacturing Sector (IEEMMS) ◆ Guidelines for best practices and measures for Improving EC minds 2. Commercial Building Sector: ◆ Enforcement of EMEER 2008 to the affected installations ◆ Energy Audit Conditional Grant Project ◆ Development of Energy Performance Contract (EPC) guidelines for goverment building ◆ 24°C temperature policy in Government buildings ◆ Building Sector Energy Efficiency Project (BSEEP) - ended 2017 ◆ Monitoring and reporting of electricity consumption in Ministries buildings ◆ Implementation of National Building Energy Intensity Labelling Program in Government buildings. ◆ Guidelines for best practices and measures for Improving EC minds 3. Appliances: ◆ Labeling, MEPS Standard and Measures for Improving EC minds.
	3-4. Name and year of introduction/revision of laws/regulations related to EC measures

	The Energy Efficiency and Conservation Act (EECA) was passed by the Malaysian House of Representatives in October 2023 and is currently being submitted to the Senate. The parliament through the House of Representative has approved the Act during the 2nd Meeting, 3rd Session of the 15th Parliament 25 Jun 2024. the EECA is in the final process of getting the royal assent from the Yang di-Pertuan Agong (YDPA). 1. Energy Commission Act 2001 ◆ An Act to provide for the establishment of the Energy Commission with powers to regulate the energy supply activities in Malaysia, and to enforce the energy supply laws, and for matters connected therewith. ◆ To promote efficiency, economy and safety in the generation, production, transmission, distribution supply and use of electricity ◆ To promote the use of renewable energy and the conservation of non-renewable energy 2. Electricity Supply Act 1990 [Act 447] as amended in 2015 ◆ An Act to provide for the regulation of the electricity supply industry, the supply of electricity at reasonable prices, the licensing of any electrical installation, the control of any electrical installation, plant and equipment with respect to matters relating to the safety of persons and the efficient use of electricity and for purposes connected therewith. ◆ Part VA – Efficient use of electricity (Section 23A – Minister to determine standards, Section 23B – Installation to meet requirements, iii. Section 23C – Equipment to meet requirements.) 3. Electricity Regulations 1994 as amended in 2013 ◆ Detail or description of Electricity Supply Act 1990 [Act 447]. ◆ Incorporation of Minimum Energy Performance Standards (MEPS) in the amendments of the Electricity Regulations 1994. Implementation and Enforcement of MEPS for 5 Domestic Electrical Products (Air Conditioner, Refrigerator, Television, Domestic Fan and Lighting). - Regulation 97, Regulation 101A, 109 A(1), 109 A(2). 4. Efficient Management of Electrical Energy Regulations 2008 (EMEER 2008) ◆ Applied to any private installation licensee or consumer whose total net electrical energy generation or total electrical energy consumption, as the case may be, equals to or exceeds 3,000,000 kWh measured at one metering point or more over any period of six consecutive months 5. Formulation of new energy conservation law including heat energy consumption: final approval stage
3-5. EC goals	1. 8% electricity consumption reduction on a BAU basis by 2025 2. NEEAP is to save electricity and reduce electricity demand growth. The effective and efficient implementation of the NEEAP supported with sufficient resources will be able to save a cumulative of 52,233 GWh of electricity over the 10 year plan period against a business-as-usual (BAU) scenario and at the 10th year of the implementation of NEEAP, a maximum saving of 8% against BAU is achieved or equivalent to 12,391 GWh yearly saving. 3. 5% reduction in electrical energy consumption in all Government buildings
3-6. Green (EC) building Code	MS 1525 : 2014 the target is nonresidential buildings MS 2680 : 2017 the target is residential building MS1525: 2019: Energy saving and renewable energy related to new construction, extension and renovation of non-residential buildings. Third revision since 2001
3-7. Display system for EC performance of the building	Development of Building Energy Intensity (BEI) Labelling (Star Rating) for government buildings 2022: BEI labeling of government buildings 335
3-8. Items based on EC Law	
3-8-1. Designation criteria of designated business operator	◆ Electrical energy consumption equals to or exceeds 3,000,000 kWh over any period of six consecutive months
3-8-2. Number of designated business operators	◆ Number of designated enterprises: 1,900
3-8-3. Obligations which designated business operator shall comply with	◆ Appointment of registered electrical energy manager (REEM) and submission of periodic reports ◆ To submit a written confirmation of the appointment ◆ To submit information of affected installation: (i) Policy of EMEE, (ii) Objectives of EMEE, (iii) The Accounts & Document pertaining to EMEE
3-8-4. Contents of energy management system	
	WEB report submission started in 2018 with introduction of Energy Management Information System (EMIS)
3-8-5. Contents of energy manager system	
	1. Under the EMEER 2008, No person shall engage in, be employed or hold himself out as a REEM for the purposes of these Regulations unless the person has been registered by the Commission. 2. Application procedure is either directly to Energy Commission or through training provider approved by Energy Commission 3. Organization that certifies energy managers: Energy Commission 4. Educational institutions for energy managers: Energy Commission, UTM, AEMAS, MAESCO, and 9 other institutions in total 5. Installation which use 3,000,000 kWh for any period of six consecutive months is subjected to EMEER 2008 and need to appoint REEM 6. Number of REEM : 1,961名(2024) 7. Validity period of energy manager: 1 to 5 years 8. We are currently considering creating an energy manager that covers both heat and electricity. The plan is to judge based on medical reports and interviews, without testing.
3-8-6. Contents of the periodic report system	
	1. Company Profile 2. Building/Factory Details 3. Production Output 4. Electricity Power Pattern 5. Specific Energy Consumption 6. Electricity Consumption 7. List of EC Activities/Projects 8. Summary of Project Savings 9. New EEEM Activities to be implemented WEB report submission started in 2018 with introduction of Energy Management Information System (EMIS)
3-8-7. Energy saving regulation for equipment “MEPS”: “Name of applicable equipment” and classification of “mandatory/voluntary”	◆ Minimum Energy Performance Standards (MEPS) for 6 domestic electrical appliances (Air Conditioner, Refrigerator, Television, Domestic Fan, Washing machine and Lighting). ◆ These appliances can only be imported sold and manufactured in Malaysia if it complies with the requirements of the MEPS
3-8-8. Energy-saving “labeling” system: “Name of applicable equipment” and classification of “mandatory/voluntary”	Labeling on a 5-point scale (6 items) S&L Label: mandatory ◆ All manufacturers and importers of the following products: television, refrigerator, domestic fan, air conditioner, washing machine and lighting must affix the Energy Efficiency Label onto the products before it can be sold to the customer
3-8-9. MEPS, labeling: Name of “certification body”	◆ Certificate of Approval (COA) will be issued by the Energy Commission Malaysia for these 6 domestic appliances after those appliances are satisfying the required Safety Standard and MEPS ◆ Number of issued COAs (certificates) in 2018: Import_8941, Manufacturing 1398, Exhibit 8 ◆ There is an e-Permit system "DagangNet"
3-8-10. MEPS, labeling: Is there “performance evaluation agency” and if so, its name?	

♦ EC Appliances evaluation as perscribed in the Malaysian Standard for MEPS which have specific evaluation criteria for each applainces and SIRIM Berhad (National Laboratoty) is in charge for safety and performance testing. SIRIM will then forward the testing report to Energy Commission for the COA approval.
3-8-11. Status to create restrictions by "benchmarks".
3-8-12. Status to create "EC guideline" and "EC manual".
not yet
3-9. EC propelling measures
3-9-1. Financial support(Subsidies, Tax incentives,Low-interest loan, Funds)
1) Subsidy: Sustainability Achieved through Energy Efficiency (SAVE) Program 2) Tax incentives: GITA (Green Investment Tax Allowance), GITE (Green Income Tax Exemption) 3) Low-interest financing: Green Technology Finance Scheme (GTFS) to accelerate the expansion of green investments by providing easier access to financing from private and commercial financial institutions. 4) Funds: Support for Energy Performance Contract (EPC) Fund by Malaysia Debt Ventures (MDV), Malaysian Electricity Supply Industry Trust Account (MESITA), Energy Audit Conditional Grant (EACG), Green Finance Programme and Green Sukuk (Sharia)
3-9-2. Supports for energy audit
【Outline】 'Energy Audit Conditional Grant (EACG 2.0) - Is an energy efficiency programme under the 12th Malaysia plan (RMk-12) for the implementation year of 2021-2025. - This programme is supported by grants which were allocated for the year 2021 until 2025 to commercial and industrial sectors to collaborate with local energy service companies (ESCOs) registered with the energy commission (ST) to conduct energy audit in their buildings. - Grant from government to industrial and commercial building/installation owner. Grant disbursement will be on first-come-first-serve basis based on the application approval. 【Objects】 Industrial and commercial building/installation owner 【Target】 Implementation of the Energy Saving Measures by the installation owner/operator with the investment cost must equal or more than the received grant value 【Percentage】 Grant 1. Industrial : up to RM 100,000 2. Commercial : up to RM 60,000 【Budget】 'RM 86,734,000.00 under RMK-12 (2021-2025) 【Budget minister】 SEDA
3-9-3. EC award system
【Outline】 'National Energy Award (NEA) - is an award that recognises the adoption of sustainable energy concepts and practices for Malaysia’s business organisations across all industries and sectors. 【Objects】 Industrial and commercial building/installation owner 【Percentage】 Winners will stand a chance to win a cash prize along with trophy and certificates. Addition to that, winners from Category 1 & 2 will represent Malaysia in ASEAN Energy Awards. 【Budget minister】 MGTC ♦ ASEAN Energy Award (Won 26 Awards) ♦ National Energy Award (Won more than 30 Awards) ♦ Energy Efficiency Challenge for high schools Accreditation system: ♦ Green Building Index (GBI) ♦ Malaysian Carbon Reduction and Environmental Sustainability Tool (MyCrest) ♦ Leadership in Energy and Environmental Design (LEED) ♦ Energy Management Gold Standard (EMGS)
3-9-4. EC training center. And the name and activities if any.
【Outline】 1. Certified Energy Manager Training Course (CEMTC) MAESCO 2.Certified Energy Manager Training Course (CEMTC) MGTC 3. Certified Energy Manager Training Course (CEMTC) IEM 【Objects】 'Personnel 【Budget minister】 1. MAESCO 2. MGTC 3. IEM
3-9-5. ESCO Business Support
【Outline】 Energy Efficiency Financing by Malaysia Debt Ventures Berhad - MDV’s Energy Efficiency Financing provides credit financing for Energy Efficiency (EE) and Energy Savings-based projects undertaken by Energy Service Companies (ESCO) in the building sector with the aim to accelerate the growth of ESCO’s business in the country and strengthen their financial credit profile. 【Objects】 Industrial and commercial building/installation owner 【Percentage】 - 1% profit subsidy for successful Applicants - Enhance credit profile of the Applicant through 50% guarantee from CGC 【Budget】 'Specific Fund allocation of RM200 million to spur the industry 【Budget minister】 MDV US \$ 50 million EPC (Energy Performance Contracting) Fund established
3-9-6. Supports for R&D
N/A
3-10. ESCO business deployment
MAESCO (Malysian Association of ESCO) exists as a promoting agency.
63 active members
3-11. Subsidy for fuel

	【Outline】 Petrol, Diesel 1. The government subsidizes RON95 petrol and diesel, while RON97 petrol is unsubsidized. Natural Gas 2. For Natural Gas, Malaysia’s power sector had historically enjoyed reduced natural gas prices under the Regulated Piped Gas Price. 【Objects】 1. Petrol, Diesel 2. Natural Gas 【Percentage】 Petrol, Diesel 1. The price of petrol at the pump is calculated using the Automatic Pricing Mechanism (APM), which is a managed float system that, in theory, should change every week as it follows the market price of crude oil. Natural Gas 2. Under the Regulated Piped Gas Price agreement, the Energy Commission mandates a price to be sold to the power sector. 【Budget minister】 Petrol, Diesel MDTCA Natural Gas NRECC, ST The Prime Minister announced that "energy subsidies to large corporations and multinationals will be reduced from RM110 billion to RM80 billion (\$17.1 billion), with RM10.76 billion allocated to subsidize electricity prices." RM50 billion on fuel subsidies in 2023 (approx. 10 million USD)
3-12. Subsidy for electricity bills	
	【Outline】 The Government on 16 June 2023 agreed to allocate an electricity subsidy of RM5.2 billion in conjunction with the electricity tariff adjustment in Peninsular Malaysia from 1 July to 31 December 31 2023 【Objects】 Electricity 【Percentage】 1. Domestic consumers with a monthly electricity consumption of 1,500 kWh or below will not experience an increase in electricity tariff. This accounts for 99% of domestic consumers in Peninsular Malaysia. 2. Non-domestic consumers in the low-voltage tariff category (Tariff B and D), specific agricultural tariffs (Tariff H, H1, and H2) will not experience an increase in electricity tariffs, and the ICPT surcharge at a rate of 3.7 sen/kWh will be maintained. 3. The new category of non-domestic consumers, namely water and sanitation operators in the states, will enjoy a reduction in surcharge rates from 20 sen/kWh to 3.7 sen/kWh. 4. Non-domestic consumers, specifically medium-voltage (MV) and high-voltage (HV) users from the industrial and commercial sector, will enjoy a reduction in surcharge rates from 20 sen/kWh to 17 sen/kWh. This means that non-domestic MV and HV users will enjoy a monthly decrease in electricity bills ranging from 4% to 6%. 【Budget minister】 NRECC, ST ◆Estimated of 70% gas subsidized for power generation ◆The government has agreed to cover 5.8 billion ringgit (180 billion yen) in electricity subsidies for the second half of this year. RM 5.2 Million on electricity subsidies in 2023 (approx. 1.1 million USD)
3-13. Name of the government organization which controls energy conservation matters	
	PETRA (Ministry of Energy Transition and Water Transformation) Mission: 1) Strategically manage the electricity supply industry by optimizing renewable energy and energy efficiency 2) Lead the governance of natural resources based on efficient use
3-14. Name of the EC promotion organization (private organization such as ECCJ)	
	1. Energy Commission Malaysia ◆ To promote and regulate energy efficiency (electrical) in Malaysia. 2. Sustainable Energy Development Authority of Malaysia (SEDA Malaysia) ◆ To administer and manage the implementation of the feed- in tariff mechanism. 3. Malaysian Green Technology And Climate Change Centre (MGTC) ◆ In charged with catalysing green technology deployment as a strategic engine for socio-economic growth in Malaysia.
3-15. Cooperation related to energy conservation by Japan	
	◆ ASEAN-Japan Energy Efficiency Market Transformation with Information Provision Scheme (AJ-EMTIPS) ◆ ASEAN-Japan Energy Efficiency Partnership (AJEEP) ◆AJEEP Scheme 4、 5 (2022～) ◆Malaysia-Japan Bi-lateral EE&C Cooperation Project (2019～) ◆ ASEAN Standard Harmonization Initiative for Energy Efficiency (ASEAN-SHINE) ◆ Zero Energy Building Design Guideline (MoU between SEDA and JASE-W)
3-16. Cooperation related to energy conservation by foreign countries except Japan	
	◆AMS (ASEAN Member States) ◆ ASEAN+3 Mitigation Cooperation Programme (KEA)
3-17. Achievements of Joint Crediting Mechanism (JCM)	